OCTOBER 1961 50 CENTS

COUNTY AGENT VO-AG TEACHER

THE LEADING MAGAZINE FOR AGRICULTURAL LEADERS

BARGAINING CO-OPS FOR BROILER GROWERS?

HOT TIPS IN BROILER GROWING

COME

Stevens Rice University Micro Films 313 W. First St. Ann Arbor, Michigan

Sound Head Threading is Gone for Good



IMPORTANTLY ADVANCED in every aspect of its operation and performance, the all-new Galaxy established many new criteria in 16mm projection.

For example, you'll never need to thread another sound head. Slide film into a slot, flip a lever, and film is positioned, sound loop formed, and sound head threaded—all accurately, instantly, automatically!

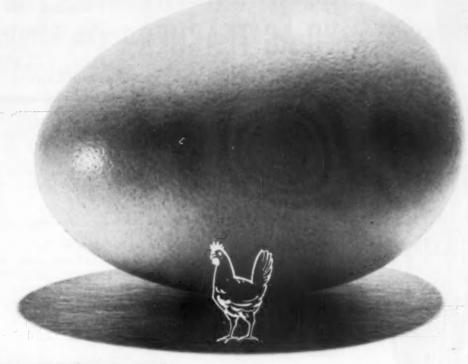
Galaxy, throughout its entire operation, is easy, positive, and fast. Grouped pushbuttons provide exclusive new full fingertip control of start, still, stop, and both light levels of its unique new high-intensity lamp. At normal brightness, equivalent to 800 watts, lamp life is extended a remarkable 10 times—to a minimum of 150 hours! For dense prints, long throws, or minimum room darkening, you don't change lamps—just push the "Hi" button for the equivalent of 1200 watts—a brilliance surpassed only by carbon arcs!

Galaxy's smooth, rapid rewind is also pushbutton controlled—without handling reels, reel arms, belts or gearing. And, take-up reel and reel arm are always ready for your next film.

Add to all this the outstanding quality of a new sound system incorporating an exclusive phototransistor for hiss-free sound pickup, plus a full 15-watt high-fidelity transformer-powered amplifier. And, for the first time, separate bass and treble controls give you full control of the acoustically designed speaker system ... provides richest music and most natural speech. It is the finest projector ever available to the 16mm field—brightest, coolest, quietest and by far the easiest to use. For a demonstration of the all-new Galaxy, call your

Graflex AV dealer or write directly to Graflex. GRAFLEX®

Rochester 3, New York. In Canada: Graflex of Canada Limited, 47 Simcoe St., Toronto 1, Ontario



3-NITRO[®] in the laying mash helps growers get more eggs-economically

• INCREASED EGG PRODUCTION • IMPROVED FEED EFFICIENCY • BETTER LIVABILITY

Dr. Salsbury's 3-Nitro is being fed to more laying flocks all the time, because successful poultrymen have found that they make more profit with 3-Nitro. They've found that 3-Nitro boosts egg production per hen, increases feed efficiency, and reduces flock depletion. And they get all these benefits at a cost of about 2 or 3 cents a bird per year. Records indicate that 3-Nitro-fed birds need a quarter of a pound less feed per dozen eggs. There is less flock depletion with 3-Nitro in the ration. A 3-Nitro-fed hen may lay up to a dozen extra eggs in a

single year—and only one of those eggs will more than pay for the 3-Nitro. The rest of the extra eggs are just that much added profit.

Remember, it takes healthy hens to get the most good out of their feed, especially during the fall and winter laying season. So, recommend that growers have 3-Nitro mixed in the mash—3-Nitro, another of Dr. Salsbury's fine additives that boost profits by improving flock health and performance.



MORE THAN PRODUCTS - A SYMBOL OF SERVICE



BE PREPARED

A lightweight McCulloch chain saw is a lot like a mechanized Scout knife—it does more than just cut. One rugged McCulloch engine powers any of the handy attachments shown above—and more—to help you cut firewood, prune trees, dig holes, clear brush, do a hundred and one other jobs. McCulloch offers you the world's most complete line of chain saws, cutter bars and accessories. Nine models as low as \$149.95. Send for free color brochures.

McCULLOCH

CORPORATION 6101 West Century Blvd. Los Angeles 45, Calif.



COUNTY AGENT VO-AG TEACHER

OCTOBER 1961 Vol. 17 No. 10

THE LEADING MAGAZINE FOR AGRICULTURAL LEADERS

FEATURES

10 It's Up to You by Milo Peterson

Too much time is being spent with high school programs and not enough with adult farmers, according to this vo-ag authority. He explains his stand in this story.

- 16 Hot Tips in the Broiler Industry Here's the latest in housing, products from industry, ventilating systems, etc.
- 26 Should Growers Join Bargaining Co-ops? by Paul Roy What you should know about bargaining co-ops for broiler growers, where they have been established, and how ag leaders should advise growers are all discussed in this provocative article.
- 28 The NACAA Convention: A report from the Editor

DEPARTMENTS

- 8 Ag Leaders Washington by John Harms & George Peter
- 12 Ag Leaders Speak Up
- 14 Late Research
- 27 Vo-Ag News
- 30 Ag Leaders Audio-Visuals by George F. Johnson
- 31 Booklet-Bulletin Reviews
- 32 New Ideas and Products
- 33 County Agents USA by Vic Carothers
- 34 In Summing Up by Gordon L. Berg

E. G. K. MEISTER, Publisher

GORDON L. BERG, Editor; R. T. MEISTER, Editorial Director Associate Editor: DOROTHY KAPLE

Washington Editor: JOHN HARMS; Farm Mechanics Editor: HAROLD GULVIN Audio-Visual Editor: GEO. F. JOHNSON; Production Manager: J. S. BENDER EDWARD L. MEISTER, Director of Advertising

District Advertising Offices

CHICAGO: Al Zilenziger, 333 North Michigan Avenue. Phone STate 2-7128.

NEW YORK: John Boisseau, 41 East 42nd St., Phone TN 7-2688. SAN FRANCISCO: E. S. Townsend, Townsend, Millsap & Co., 110 Sutter St. Phone SUtter 1-7971.

LOS ANGELES: M. E. Millsap, Townsend, Millsap & Co., 159 S. Vermont Ave. DUnkirk 3-1211.

COUNTY ACENT AND VO-AC TEACHER is published monthly by American Fruit Grower Publishing Co., Willoughby, Ohio. E. G. K. Meister, Publisher and Chairman of the Board; Edward L. Meister, President; Richard T. Meister, General Manager; Gilbert Meister, Vice-President. Single current copies 50¢; copies over one year old \$1.00.

When changing your address, please send us old as well as new; send address label from your last copy; allow 6 weeks for the first copy to reach your new address.

Accepted as controlled circulation publication at Ashland, Ohio.

Member Business



Publication Audi



5-0504

Bell & Howell engineering creates the most revolutionary 16mm sound projector in 25 years... different from top to bottom...inside and out!

IT'S LIGHTER! IT'S BRIGHTER! IT'S EASIER TO USE!

Bell & Howell

spectalist

look

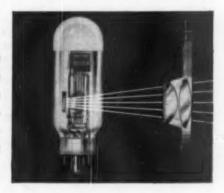
THIS IS THE NEW FILMOSOUND SPECIALIST!





20% LIGHTER than any other major audio visual projector. It weighs only 29 lbs.! It is the first projector with a magnesium die-cast unitized frame - lighter . . . stronger . . . extra tough! The new FILMO-SOUND SPECIALIST is not just light enough to lift . . . it's light enough to carry . . . and rugged enough to take the bumps and bangs. This will mean considerably more use in classrooms. Teachers will be more enthusiastic about using films when they don't have to handle a cumbersome piece of equipment.

34% BRIGHTER than the average 16mm projector! The newly designed Proximity Reflector lamp and a new f/1.4 Super Proval Lens give sharper images and more brilliant colors . . . a picture with punch. No need for special shades or blinds in most classrooms. The new FILMOSOUND SPECIALIST is so bright it is even replacing arclight projectors in many school auditoriums, besides serving double duty in classrooms. And you can interchange 750, 1000 and 1200 watt bulbs and still get more light with each.





FAR, FAR EASIER TO USE with the most simplified controls ever put on a 16mm sound projector. It sets up from closed case to projected picture in a little over a minute. Rewinding is fast and simple, you don't change reels. Internal gears operate the reel arms; no belts to switch... or to tear loose. An automatic lower loop restorer keeps the film moving smoothly and quietly without interruptions - even with damaged film. Teachers and students can show films confidently without being professional projectionists.

The rapidly growing importance - and cost - of modern school audio visual programs make it imperative that each appropriated dollar be spent as wisely as possible. In addition to considering the tangible advantages of the FILMOSOUND SPECIALIST, consider one intangible: it is made by Bell & Howell . . . maker of over half of all the 16 mm sound projectors now in operation. Bell & Howell quality means dependable durability. Bell & Howell experience means a projector tailored to your exact needs. In short, the FILMOSOUND SPECIALIST will go more places and do a better job under more conditions than any other school projector in the world!

CLIP THIS COUPON AND MAIL TODAY!
BELL & HOWELL COMPANY, Dept. CA-16 7100 McCormick Road, Chicago 45, Illinois
I am interested in the FILMOSOUND SPECIALIST for our school audio-visual program, Please send me more information.
NAME
POSITION
SCHOOL
ADDRESS



THROUGH IMAGINATION

Watch for "Bell & Howell Close-Up!" Informative . . . Provocative. ABC-TV Network, Oct. 31, Nov. 14, 23, 28, Dec. 5, 10 and 13.



ag leaders washington

\$250 million vocational education program underway

THE ROLE of the vo-ag educator is now on the way to getting a great expansion under new government programs. Health, Education and Welfare and Labor Departments are heading up the changes. Opportunities are not only to increase in number but vo-ag teaching in the new programs will reach far beyond the present limitation to training in agriculture for strictly "on-the-farm" occupations.

The turnover we have been predicting is taking place. HEW and Labor Department are ready to go with a big, more than a quarter-billion-dollar spending program for vocational education of all kinds, including agricultural. They will have the authority under the new Manpower Development and Training Act. Officials have had plans under way for months, so you should see some action almost at once.

The major new switch is that government education officials will use all existing units of the vocational programs interchangeably. For the most part, this means the major three—vo-ag, home economics, and trades and industry.

For example, if the training required is considered "trades and industry" but actually requires a considerable knowledge of agriculture, vo-ag training will be called for whether the occupation the trainee will eventually be in is "on farm" or not. Officials will use this approach especially in setting up training programs for the agricultural services industries.

HEW also plans to use the experience gained from trying out the greater flexibility plan on vo-ag units in writing new vocational legislative proposals for Congress next session. Plans in the making now call for expansion of the vo-ag teaching role under the Smith-Hughes and George-Barden acts as well.

THE NEW vocational training programs are separate and distinct from the present long-established programs. One big aim is to get those unemployed who are victims of automation and advanced agricultural techniques back into useful occupations. What officials are doing is stretching the higher rural income concept to include the economy in all areas.

Vo-ag training fits into the new program like this. First, the Secretary of Labor makes a survey to find out what skills are needed, what skills the unemployed have, and how capable they are of learning new skills. HEW and Labor Department then work out the kind of training program needed. The trainee applies to the state employment office which refers him for the program or disapproves.

Workers in farm families making less than \$1200 annually may be considered unemployed under the new programs and eligible for training and subsistance allowance while learning how to apply their experience to some "off farm" but agriculturally related job.

HEW keeps its full responsibility for vocational education programs. As in the past, the agency will work with state vocational education authorities to provide the needed training. The Secretary of HEW will have the authority to enter into agreements with the states to set up the training programs in return for government payments.

No state matching funds are required the first year in the case of the unemployed. Fifty per cent of the cost must be met by the states for others. Most of the quarter-billion-dollar fund is to go for teacher salaries and subsistence allowances for trainees over a two-year period.

Labor Department doles out the funds on a strict formula laid down by Congress. Both HEW and Labor share in the spending according to the type of program and the size of the state labor force compared to the national labor force.

Both agencies are determined to push the combined program. The purpose is to put people back to work. So this is what you should watch: if the state cannot provide the kind of training needed, Labor Department has served notice that private training institutions may be asked to co-operate.

BUILT-IN SAFEGUARDS by Congress are aimed to prevent the new programs from upsetting vocational programs long in existence. No training or retraining programs financed with federal money will be approved unless HEW and Labor are satisfied that the area where the training is carried out is NOT cutting down on matching funds for other programs.

NEW interphone

Stretches your time

· Gives you tighter control of your operation

Farm Interphone ties your whole farming operation together. It's a new system that gives you both regular telephone service and intercom from strategically located points around your farmstead. With it you can talk and hear over

a wide area without taking a step or interrupting your work. Your wife can handle calls and discuss them with you without running to the buildings. Interphone helps you run things more smoothly-accomplish more every day.



Saves trips between house and farm buildings

Suppose your wife has an outside call and needs to discuss it with you. She can "hold" the call, "broadcast" to you, get your reply, then complete the outside conversation. Or you can take over the call in the barn, if you wish.



want privacy, pick up the phone and talk directly to her.



Hear that ring?

When you prefer, your telephone ring is broadcast over the outside speaker and speakers at other Interphone stations. You don't miss important calls when you're away from the house or the farm buildings. Answer on any phone.

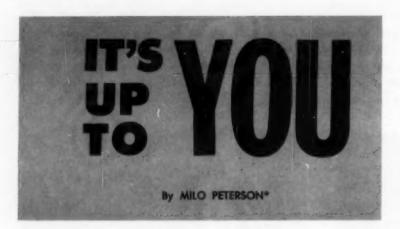
If you'd like to know more about Farm Interphone and what it can do for you, just call your local Bell Telephone Manager-or ask your telephone man when he is in the neighborhood-or mail the coupon below. There's no obligation on your part, of course.

Mail this coupon to:

	one Division, Room, New York 7, New	
I would like c	omplete information	on on Farm Interphone
Name		
Name		



BELL TELEPHONE SYSTEM



DURING THE PAST DECADE it has become popular to quote census figures to show that agriculture is going the way of the vanishing American. Reams of press releases and millions of words describe the "declining farm population" as a trend—apparently a new trend.

To be sure, the number of people on farms has declined. This has been going on ever since 1860 with the exception of serious depression periods.

This is a trend fostered by electrification, mechanization, and education. It is one in which vocational agriculture can take great pride since it has played a major role in helping to increase the efficiency and productive capacity of the family farm.

There have been some rather dangerous side effects from the misinterpretation and misleading commentaries purporting to give factual analysis of this long-term trend. The result is a perverted image of agriculture in the public mind. Sadly, this perversion has afflicted many who should know better.

Conclusions are drawn to the effect that because we have increased the efficiency of farming to the point where additional resources are available for other pursuits there is less need for agricultural education through the public schools. The danger and ridiculousness of this conclusion becomes apparent if we apply the same perverted logic to other situations.

Consider the trend in number of school districts. We had about 100,000 school districts in 1950 and 40,000 in 1960.

Shall we then recommend to school administrators that they prepare to go out of business because the trend shows a decline in numbers of districts and school superintendents needed to run them!

The fallacy lies in failing to recognize that the extra human resources released from farming for other productive work are available only because of an increasingly efficient agriculture. To become so concerned with those who will leave the tarm that we abandon the foundation stock on which the total structure rests will dry up the stream of progress at its source.

Another general trend in agricultural education has been the increasing difficulty faced by young men in becoming established in farming. Inheritance, marriage, or wealthy parents have replaced the traditional "agricultural ladder" in recent years.

The major bottleneck in this process of getting started in farming has been the high capital requirements. It is just more difficult to make that first step. But there are two other trends, one the corollary of the other, that are less obvious and more subtle yet significant.

VO-AG-A "CLEARING HOUSE"

One is the absence in most communities of a clearing house of information on available opportunities in farming and farm-based occupations. There is no discernable evidence that teachers of

*Dr. Milo Peterson is head of the department of agricultural education, University of Minnesota agriculture even know how many farmers and farms there are in their school patronage area. A complete farm family survey of every school area is a necessity if this trend is to be reversed.

How many of you know how many farms are in your school service area?

The other side of the equation relates to the absence of information regarding available qualified young men who want to get into farming. For example, how many of you have a card file or any other compendium of data on the young men out of school in your area? This trend toward continuing evasion of responsibility for establishing qualified young men in farming is deserving of immediate attention. This is the heart of vocational agriculture.

There is another trend to which we should give consideration. I refer to the gathering momentum behind federal assistance across the board to elementary and secondary education. But for the opposition and effective political maneuvering of a strong religious group this might well have been accomplished by

Should public funds from the federal level become available to public schools we can anticipate certain adjustments in reimbursement policies for vocational agriculture. We should prepare for alternative courses of action. At present the picture is unclear. For my own part, I would oppose any aid program that would put public money into non-public uses.

Another movement that may have an influence in agricultural education is the current science and mathematics "kick." This has caught the fancy of some groups and may have tended to temporarily limit the educational opportunity of those who would find opportunity in agriculture.

It is encouraging to note that the principals, superintendents, and school board members with whom I have had contact are, in the main, committed to the community school philosophy which is not in harmony with increasingly rigid subject requirements for high school students. This does not mean opposition to more math and/or science, but it does mean that this trend must not curtail the opportunity to study agriculture. Students interested in agriculture need science and math as much or more than most and the opportunity must be provided without prejudice to either offering

We have heard so much about the declining number of farmers that occasionally our colleagues in other fields of education translate this into meaning ipso facto fewer enrollments in vocational agriculture. In fact, I am told that some folks are ready to ring down the curtain and walk slow behind us. If this should ever come to pass it will be our own fault, not through lack of students, but through faint heart and false assumption.

Assuming that 10 years are sufficient in which to identify a trend, I would call your attention to a few specific developments in vocational agriculture.

CENTRAL REGION GAINS

I venture to say there may be a surprise or two involved as we review developments in vocational agriculture from 1950 to 1960 in the Central Region.

During this period there has been a 15% increase in the number of vocational agriculture departments in the central region. For Indiana the increase was 11% and in my home base of operations of Minnesota this decade witnessed a 69% growth in number of vocational agriculture departments. For purposes of comparison it may be noted that Kansas showed an increase of 22%.

One may properly suggest that this trend, while encouraging, does not tell the whole story. How do these figures compare with the changes in number of high schools? The figures are not quite comparable because the data for all high schools covers only an 8-year period. Nevertheless, they are offered for what they are worth from 1950 to 1958.

Indiana, which had an 11% increase in vocational agriculture departments, showed a growth of 6% in total number of high schools. Thus the growth in agriculture exceeded that of all high schools. In Minnesota the increase in number of high schools was approximately one-fourth as great as the increase in vocational agriculture departments. The state of Kansas had a decrease of about 8% in high schools while increasing high school agriculture departments by 22%.

These statistics do not suggest that vocational agriculture is a dying swan.

More important than the numbers of departments or high schools is the number of students enrolled. In this case we would expect to find reflected the results of population shifts.

As the efficiency of the family farm has increased and more of our population is released for other occupations it can be assumed that the percentage increase in total high school enrollment will exceed agriculture enrollments. And indeed such is the case.

Total high school enrollment in the United States during the past decade amounted to about 31%. For the three states of Indiana, Kansas, and Minnesota the figure is 71%. In substantial measure this is due to higher attendance rates among farm youth as well as the greater numbers of non-farm boys and girls.

The enrollment in high school agriculture classes has also increased. From 1950 to 1960 the increases for Indiana, Kansas, and Minnesota are 16, 14, and 64% respectively for an average increase of 32%. Thus the actual trend belies the prophets of doom.

Among the most significant trends in our profession are the increases in young farmer and adult education. Here indeed is the future of agricultural education in the United States for here is real education for farming.

Indiana is just making a beginning in the young farmer program. So are all the other states when the need is balanced against performance. But the trend is encouraging.

Indiana showed the greatest percentage increase from 1950 to 1960 of any state in the region with a phenomenal 3400%. However, the numbers are small, with fewer than 2000 enrollments reported in 1960. Even so this was the third highest enrollment in the region. The percentage increase for all 13 states was 23%.

In the adult program the region is beginning to move. The trend toward increased enrollment is evidenced by a 47% growth for the decade. Nebraska with 518%, Indiana with 479%, and

Minnesota with 296% increases are the pace setters. It is entirely probable that the quality of adult education is of greater importance than any other development in our field.

As more states turn to the farm management approach to education for farming we can look to the future with confidence. The trend toward developing adult programs more closely identified with the really significant problems of farm operator is encouraging.

Whatever we do in high school classes is of no consequence if we do not initiate a trend and push it with all our energy toward maximum effort in young and adult farmer education.

I have seen departments with flourishing high school programs get into trouble, but never have I seen a department with a vigorous, sound adult program discontinued.

One trend of historical importance that shows only slight evidence of terminating has to do with the allocation of resources in vocational agriculture. Since 1917 we have devoted the lion's share of our time and treasure to the high school program at the expense of adult education which is the original backbone of vocational agriculture.

Those who have entered upon the occupation of farming are our first responsibility, but we have become so snarled up in the high school work we can't see the forest for the trees.

When we think of enrollment in vocational agriculture we all too often include only the high school students.

I am not suggesting that the high school program is getting too much attention, but I am very definitely stating categorically that the young farmer and adult programs must receive equal, if not greater, attention.

This points to a trend that must be developed. For four decades we have ambled along in false security and foolish pride thinking that one-teacher departments represented an adequate arrangement. From now on this must change.

One-teacher departments cannot do the job. Two-, three-, five-man departments must be developed. Our only alternative is to reallocate our resources to provide 60% for young and adult farmer work and 40% for the high school FFA work.

So let us start a few trends of our own. Multiple teacher departments, vastly increased adult work based on the farm management approach, a young farmer program that gets to the heart of the problem of establishment in farming.

No other unit of our society is structured to meet the educational needs of farm people as well as our public schools. This is our task if we are to be true to our professional ideals.

DO YOU REALIZE . . .

Vocational agriculture COULD be the true champion of farming!

Vocational agriculture SHOULD be expanding its adult work!

Vocational agriculture SHOULD NOT settle for less than twoteacher departments—and should go as high as five!

Vocational agriculture should be STARTING trends

-not following them!

ag leaders speak up

WE STARTED SOMETHING

An article entitled Your Shop Boys Can Build This Plastic Greenhouse by A. B. Ken-Build This Plastic Greenhouse by A. B. Kennerly, assistant editor, extension service, Texas A & M College, which was published in your July, 1960, issue of COUNTY AGENT AND VO-AC TEACHER developed quite some interest at Oakcrest High School vo-ag department last September. Since we have had favorable comments on our greenhouse project and since your magazine started the ball rolling, I thought you might be interested in our



We refer to our structure as a propagating house and it is considered more of a perma-nent structure than portable. Basically, the plans are the same but ours does differ slightly from the original. As an example, the floor is a wire mesh with a covering of coarse gravel.
We have installed a 400-watt heating unit which is thermostatically controlled. Heating cable is provided for one of the benches (3x12 feet). A misting system was installed. We plan to install an evaporative-type cooler. The framework of the house was built from old lumber, so the only expenses were the polyethylene (double thickness) and the wire mesh for the floor. The board of education co-

operated by purchasing the heating units.

Activities have been limited because the heater was installed in April; we had hoped to have it installed during the winter. Of course, without a cooling system, summer ac-tivities are few. The students who developed the project, however, did successfully root soft- and hard-wood cuttings and germinate flats of seed. My personal interest in this project is twofold: to have a source of teaching ject is twofold: to have a source of teaching and demonstration material and to offer an opportunity to students with greenhouse in-terests and limited home facilities to practice some propagating skills. It is also hoped that the project will earn the FFA some money. In the very near future, Oakcrest High will build a permanent greenhouse on the school grounds. We like to feel that our small propa-gating house had a direct influence on these

gating house had a direct influence on these future plans.

ANTHONY J. JUESTRICH Vocational Agriculture Instructor Mays Landing, N. J.

ABOUT HORIZONS

It is good to know that you are continuing your crusade in behalf of American agriculture. I do think, however, many of your view-

Up are somewhat narrow.

Unless Extension, and the rest of us too, are able to adjust to "broader horizons" there will be no horizon left for us. The farmer and agriculture in general have long had a special place at the dinner table; the days of this special position are numbered. Farmers, administrators, educators, manufacturers, magazine editors—everyone with an agricultural interest are going to have to adjust to the changing situation.

We could fight a delaying action and in the end be eliminated. There are, however, new and varied fields of action in which we

can be aggressive and strong

LOUIS A. PLOCH Associate Professor of Rural Sociology University of Maine Orono, Maine

I think you really left yourself wide open with your statement that the farmer, and ag-riculture in general, have long had a special place at the dinner table. This is the kind of publicity that has hurt agriculture. Of course the facts are that since 1952, the cost of living has increased about 11%. The cost of food has increased about 2%. At the same time, the re-turn to the farmer has dropped about 15%.

I just wanted to express to you my disap-pointment in your attitude toward the "mod-ernizing" of the Agricultural Extension Service. It seems to me that you have not bothered to very carefully review the situation and as the result of this you are making it appear that there is a good deal of dissension in the ranks of the Agricultural Extension Service and particularly at the field staff level. I would like to suggest that if you are really interested in learning more about what is being done now and why it is being done that you might con-tact our Associate Director of Extension here in Iowa, Dr. M. A. Anderson, or Mr. C. R. Elder, our Director of Information here.

I have enjoyed this publication but when I ee the way you have been handling this situation I am frankly somewhat disappointed and a bit disillusioned in your attitude. E. R. DUNCAN

Extension Agronomist Co-operative Extension Service

Ames, Iowa
I note that you are a little bit concerned
bout "dissension in the ranks of the Agricultural Extension Service and particularly at the field staff level." I wouldn't say there was dissension, and that's not what we're trying to create. But we do not stand for the status quo. treate. But we to not stand for the status government of ex-tension people all the time about these prob-lems. In fact, in speaking to a specialist just the other evening, he expressed a great deal of concern about extension. So, as with all important issues, different people express varied ideas. Isn't this one of the major reasons we are advancing at the rapid rate of today?

I was very much interested in your editorial in the May County Agent and Vo-Ag Teach-ER under the heading Beware of the Academic

We have recently completed a work shop on job description. The part that involved me was the specialists, which is somewhat different than the role of the county agent.

I believe where you have gone astray may be due to the fact that you are talking of persons in the field with extension training and extension experience. We must look at this from the viewpoint of the person who is going on the job without this background. In such cases it seems to us to be vitally necessary for him to take training courses such as were indicated here.

Without any expression of ego I think that extension has reached a point where one must have training in this field in a manner com-parable to one going into teaching or research. In order to obtain this, instruction in these

fundamentals is required.

I will concur with you to this extent that a statement was made in a discussion meeting statement was made in a discussion meeting last fall to the effect that when the county agents come in from the field for a refresher course that they be given subject matter in an amount at least comparable to the method courses that are offered to them.

If I may summarize to the effect that I think there are to this as to all other subjects, two sides and in this instance only one has been

I. B. HAYES Department of Poultry Husbandry College of Agriculture University of Wisconsin

I agree with Mr. Hayes that the man going into the field without previous experience needs far more training courses in communications than the "pro" does. But if he is to be accepted by farmers he had better know his subject matter and not flaunt his newlywon "honors" in sociology, communications, etc., in their faces too much!—Editor.

I must take exception to your editorial Be-ware of the Academic Trap in the May. 1961 issue.

Perhaps the farmer couldn't, as you say, "care less about Extension methods," but all Extension personnel had better care more if we are to continue to retain the "magnificent you have so generously bestowed upon mage the agent.

By comparison, most of your readers "couldn't care less about publishing and editing methods" but you and I both know the importance of your keeping abreast of the times in the publishing business if your magazine is to meet today's competition.

It won't matter much how good the "subject matter" is in your magazine if the mes-sage fails to reach the reader because some other publication has more appeal to him and he hasn't bothered to open or (even worse) subscribe to your publication.

If my analogy is correct, we're both in the same business—information and education—and we both need to keep up to date on the "techniques and methods" of our respective business if we are to do the job we set out

I hope our agents will also be just as careful not to fall into the "editorial trap" you have set, as the "academic trap" of which you have so unwisely warned.

STEWART G. CASE Community Development Specialist Extension Service Colorado State University Fort Collins

The "editorial trap" to which you refer will be worthwhile if it makes people read and think. By the looks of things it's succeeding on both counts.-EDITOR.



... right to its leaf tips!

The photograph shows several leaves of a red bean plant growing in soil to which radioactive sulphur (S-35) had been added. Note how the sulphur originally implanted in the seed traveled well up and into the vein pattern of the leaves themselves. It will do this only when the seed sulphur is replaced by sulphur from the soil.

Quite evidently the red bean plant wants sulphur. Other plants in varying degrees react in a similar way, indicating that many plants do hunger for sulphur as a nutrient and without it do not crop well. Is it wise, then, to ignore or even down-grade the need for sulphur in plants?

A concise, illustrated discussion of this subject as it applies to many plants is available in our new brochure "Sulphur in Plants and Soils." Would you like to have copies for yourself and associates?





EXAS GULF SULPHUR COMPANY

75 East 45th Street, New York 17, N. Y.

811 Rusk Avenue, Houston 2, Texas

Sulphur Producing Units: Newgulf, Texas . Moss Bluff, Texas · Fannett, Texas · Spindletop, Texas · Worland, Wyoming

Okotoks, Alberta, Canada

late research

- Control of nervousness in hens improves egg quality
- Beekeepers can keep the sting out, but flavor in
- Alfalfa grows faster while the radio plays

Plants produce an optimum yield only when there is enough moisture in all areas of the root system. The deeper the roots are, the less effective they are in supplying water to a plant.

Arthur J. Pratt and Leslie Farkas, two Cornell University researchers, also found that plants are able to survive dryness in any one area of their root zone if there is water elsewhere in the root zone, but that this condition reduces the total plant yield.

formers should keep their hens calm if they want quality eggs. Nervous conditions among chickens can cause soft-shelled, out-of-shape eggs, and eggs with blood spots.

This was discovered by two Rutgers University poultry scientists who are giving the problem close attention. At present, they are studying the anatomy of nerve pathways and its direct affect on egg formation.

Future farm buildings may have lighter, stronger roofs than most present-day structures. Two-way curves are being combined with the strength of lightweight, strong, economical sheathing materials, which have been used in the past for covering rather than for strength.

These roofs withstand the downward pressure of heavy snows and the upward pressures of wind because the curved shapes are specially positioned to withstand these loads, report scientists at Virginia Polytechnic Institute.

Testosterone, a male hormone, causes a pullet's comb to enlarge during the laying period, according to Dr. Bhagabat Panda of University of Maryland poultry department. Dr. Panda, experimenting for results of testosterone on nonlaying pullets, found a similarity to body changes of the laying pullet during egg production.

While stimulating comb growth, the hormone also brings about further development of the kidney duct and increases red blood cell count. Granular insecticides are being used now and will have much wider use in the future for controlling soil insects in corn fields. Mr. J. W. Apple, a University of Wisconsin insect control specialist, speaking at a meeting of the American Society of Agricultural Engineers, told its members of his experiences with the granulated chemicals for controlling rootworms and wireworms.

Experiments indicate the granules also control white grubs, root borers, and root curculios besides foliage feeding insects such as alfalfa weevils, spittlebugs, and grasshoppers.

Apple suggested three important areas of research yet to be covered: the most desirable formulation for each insect; production problems; and the designing of machinery to apply the granules.

Farmers can turn on the radio and relax, while their alfalfa grows. USDA laboratory studies have proven that brief exposure to radio frequency (r-f) electric energy has increased germination of alfalfa seed by 35%.

Studies are being carried on to observe the results on other legumes. Tests on grain sorghum were promising, but inconclusive.

Don't get stung! Use propionic anhydride to repel bees from combs while harvesting honey, is the advice of USDA scientists to beekeepers. More efficient than methods used in the past, this volatile chemical presents no residue problem. The bees become gentle and easier to work with, but there is no change in the honey flavor or odor.

This new method may help expand the industry to provide increased numbers of honey bees for pollinating agricultural crops.

Hay crushing machines can slash alfalfa hay field curing time in half, according to research at University of Delaware. Moisture in conditioned hay fell to 16% in a 29-hour period while the untreated hay from the same field retained 30%. In all tests, crushed hay

was ready for baling at least a day earlier than the uncrushed.

Dr. William H. Mitchell, agronomist, found that by preventing loss of leaves and small stems, fast curing saves up to 10% more hay and improves protein content which could be lost in shattered leaves.

Quackgrass is no longer a problem in corn growing, when atrazine weed killer is used, says Agronomist K. P. Buchholtz at University of Wisconsin. This condition is usually present on land that has been in hay for two or three years, which is the normal spot for corn planting. Atrazine, sprayed on land before plowing, gives practical control of this grassy weed without frequent cultivation.

Cereal crops which normally follow corn in crop rotation aren't injured by normal rates of the chemical applied the year before.

A new fiberboard lining may be the answer to safe high-moisture corn storage. University of Illinois agricultural engineers have been testing the moisture-proof, airtight material, for the past eight months. They lined a steel bin in a converted ear corn crib with the fiberboard, which is coated on each side with a layer of polyethylene film and aluminum foil.

After five months, the corn samples showed no appreciable change in moisture content, although some mold appeared on broken or cracked kernels. Further tests will be made to check the effectiveness of the material over a wider range of moisture conditions and for longer periods of storage.

Big farms are safer than small ones. A recent report from New Mexico State University says that the smaller a farm is the higher the average work injury rate. In fact, the study on which this statement is based shows that the smallest farms have an average injury rate nearly six times higher than the largest farms. Tractors and other machinery were involved in more than 40% of the injury accidents.

County Agent News

Jim Hubbard, of Hawaii, is one of a few, if not the only male home demonstration agent in the country.

Having studied both landscaping and interior design at Washington State



Hubbard illustrates each point during a demonstration on landscaping, by adding colored cutouts to the flannel board layout.

University, he is in popular demand as a lecturer on landscaping. He also provides assistance to homeowners.

Hubbard, who is a member of Hawaii Home Demonstration Agents Association, has recently been initiated as a regular member of the Hawaii County Agents Association.

OPEN HOUSE

Plymouth County, Iowa, extension service personnel found a sure-fire way this year to introduce the residents of their county to the many phases of the extension educational program. When the staff moved to new and modern offices in Le Mars, they gave an open house for the general public.

Local business firms provided publicity for the event and sent flowers to the new offices. As guests arrived, they were asked to register by staff members and then were taken on a conducted tour of the building in groups of four or five. Staff members alternated as guides.

The extension personnel were pleased with the results of their open house. They estimated that about 15% of the guests had never been in the extension offices before.

Guests expressed surprise at the scope of the extension educational program. According to Arlie Pierson, Plymouth County extension director, giving an open house offers an excellent means of identifying extension service activities.

VITAL STATISTICS

Industrial officials estimate that total spending on photographic products has leaped from about \$500 million to about \$1.2 billion over the last decode.

Last year more than 50 million amateur photographers took over 2.2 billion photographs, color pictures occounting for nearly half of the total.

-New York Times

Why Redwood is a shrewd choice when building farm structures



Redwood is often used for animal shelters such as this hog house on the Ronald Downey farm, Miles, lowa, because it stays weathertight and provides exceptional insulation value (redwood one-inch thick equals concrete 15 inches thick!). For structures of this type, "A" grade redwood is ideal, for it combines low-cost and excellent durability and can be left unfinished without risk of weather-checking.



Water sterage tanks of redweed give exceptionally long service with a minimum of care. The reason, of course, is because the heartwood of redwood combines maximum resistance to decay with minimum shrinkage and expansion.

Unlike mest woods, redweed imparts no noticeable odor or taste to either solids or liquids. It does not have to be pressure-treated, even when in contact with the ground, and is therefore preferred for trench silos as there's no danger of tainting the milk or toxic poisoning of animals.

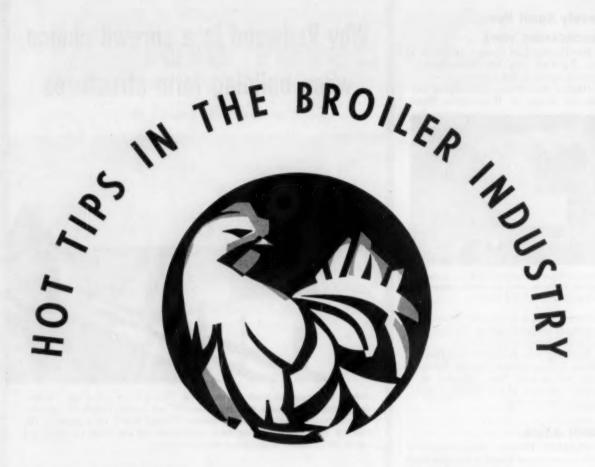


Write Dept. S-3 for your copy...
"20 Ways to Use Redwood on the Farm."

CALIFORNIA REDWOOD ASSOCIATION 576 SACRA INTO STREET . SAN FRANCISCO

The California Redwassociation coordinates the research, forest management, grading and consumer service activities of these member mills: UNION LUMBER COMPANY • THE PACIFIC LUMBER COMPANY • GEORGIA-PACIFIC CORPORATION • WILLITS REDWOOD PRODUCTS CO. • ARCATA REDWOOD COMPANY • SIMPSON TIMBER COMPANY

CRA-TRADEMARKED CERTIFIED KILN DRIED REDWOOD



Pest Control . . . Production . . . Medication . . . Diet . . . Housing . . . Contract Farming . . . Foreign Markets . . . Prices

A CCELERATION! Jet planes, rocket engine automobiles, men in space, and atomic submarines are all segments of the age of acceleration. From solar houses to xanthophyll, the broiler industry is keeping pace in this rapidly moving era.

To stay in the race, check these "Hot Tips" for speedy answers to problems of dieting poultry to contract farming.

Lousy poultry is a poor risk! Prof. George D. Quigley of University of Maryland Poultry Department, after a two-year study on the effects of lice on poultry, says it pays to go to the expense of controlling these pests.

A significant loss of body weight was observed in the lousy chickens and bites causing a scabby type of skin damage which reduced carcass quality by two grades.

Lice can be controlled by sprinkling 1.25 pounds of 4% malathion on each 100 square feet of floor area and litter. This treatment is inexpensive and will also control other parasitic insects.

Shoo, fly! One of the major management problems on large poultry ranches

is the fly. According to Ervin L. Bramhall, Ventura County Farm Advisor, Julius Egg Ranch at Moorpark, Calif., controls the fly cycle by using plywood dropping boards under growing and laying cages.

The boards keep the manure off the ground. Air can circulate around it, drying it faster than conventional methods. Any liquid that is discharged tends to drain off and evaporate because the boards are at a 12° slope.

For mechanical clean-out, a machine designed and built by Grether Agricultural Service in Oxnard, Calif., scrapes and loads the manure. The scraper is mounted so it conforms to the slope of the board. This machine removes manure from 600 feet of dropping boards every ten minutes. With regular removal of droppings, fly breeding is stopped.

Less cost, but more eggs, are the results of using today's feed additives such as antibiotics and organic arsenical compounds, while using synthetic and crystalline vitamins.

Dr. Clayton E. Holmes of Virginia Polytechnic Institute poultry department reports that the result of these improvements is a feed often containing 20 ingredients.

So, today, hens produce 12 eggs with approximately 4 pounds of feed. Forty years ago, it took 8 pounds. These feeds are largely responsible for the specialized poultry industry in the U.S. today.

Vetstrep, an economical antibiotic water medication, has been introduced by Merck Chemical Division, Merck & Co., Inc., to combat nonspecific infectious enteritis, control periods of stress, and stimulate feed intake in poultry.

Vetstrep is completely soluble, and disperses quickly. It can be easily used in automatic water proportioners. Containing streptomycin, it provides prolonged action against bacteria which cause enteric disorders.

The new solution is packed in 200 cc and one gallon plastic bottles. This is a new form of granular Vetstrep, which has proved so effective in the past.

Should broilers be on a diet? According to researchers at Virginia (Continued on page 21) Research BULLETIN

COUNTY AGENT VO-AG TEACHER WINTER PROJECTS for school and farm shops

SPONSORED BY THE LINCOLN ELECTRIC CO.

CLEVELAND 17, OHIO

WINTER IS FOR PROJECTS

Winter-time gives a farmer a chance to repair and build in preparation for the next season. It's also the time when shop teachers are looking for projects for their students which will be interesting and useful. Here are a few ideas.

REPAIR PROJECTS

Every farm, by the time winter rolls around, has accumulated a long list of broken and worn items that need repair. Some of these have to be fixed on the farm because of their size. Others can be dismantled and brought to the school shop for repair. Worn clevices, hitches, and shafts need rebuilding. These make good constructive projects for developing skill in arc welding. Broken brackets, frames and mountings need fixing on practically every major piece of equipment.

MODIFICATION OF EXISTING EQUIPMENT

One of the most useful types of winter projects for any farm boy is in making attachments or modifications for equipment now on his farm. These projects give a real opportunity for a young man to show his ingenuity and imagination.

Sometimes older equipment can be adapted to newer techniques. Specialized applications on his farm may require unique equipment. Such items as wide span sprayers, multiple row cultivators, and land leveling scrapers can be made from scrap and spare parts as attachments for his power equipment. Sometimes too, equipment designed specifically for one crop or one season can be made useful the year round by ingenious attachments.

HARDSURFACING FOR LONGER WEAR

Every farmer knows how soil wears away his earth-working tools and dulls them eventually to uselessness. He throws away a share that weighs 10 lbs. when less than 1 lb. has worn away. By adding less than ½ lb. of hard-surfacing materials to a new share, the farmer can retard wear and extend its life from 3 to 5 times. In the winter this can be done in his leisure. It makes a good school project too, and can be used to teach the techniques of surfacing with a single carbon, with an arc torch, as well as with the standard hardsurfacing electrodes.

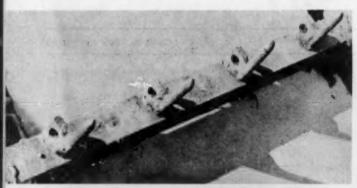
BUILDING NEW

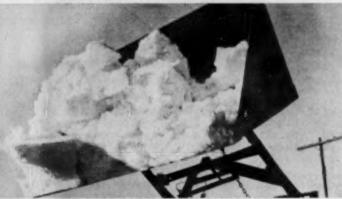
Here is the real opportunity for ingenuity both at school and at home. Thousands of pieces of equipment, both small and large, have and can be built by farm boys.

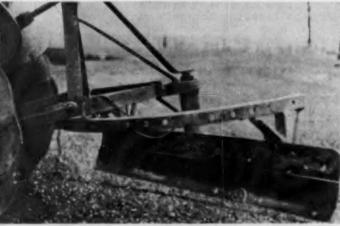
BOOKS AVAILABLE ON SCHOOL AND FARM SHOP PROJECTS

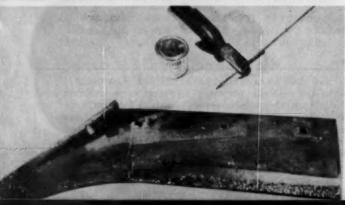
Books, pamphlets, and alide films published by the J. F. Lincoln Arc Welding Foundation are available on every aspect of farm welding. These books are made up of projects actually repaired or built on farms all across the country. Foundation books are published at cost on a non-profit basis in order to sponsor wider knowledge of the use and applications of arc welding on the farm. See the back cover of this Research Bulletin for details.

Winter is the time for REPAIR on the farm,









REPAIR

In addition to the general maintenance and fixing of broken parts which are common to the winter months, frequently a little reinforcement can prevent future failures.

In the picture at the left the teeth on a manure spreader beater became worn and bent. New teeth also bent in a short time. By welding a 3/4-inch nut behind each tooth after it was straightened, a permanent repair was obtained. Old rusty nuts became useful repair parts.

MODIFICATION OF EQUIPMENT

Shop projects during the winter can often extend the usefulness of basic equipment to other functions.

The snow scoop shown here, made by a Pennsylvania farmer, is attached to the frame of a manure loader. It doubles in brass as a feed scoop also. A square fuel tank made of ½-inch sheet steel was used in making the scoop. The tank was cut in half diagonally and the two halves were butt-welded together end to end. Some reinforcing with angle iron, and brackets to attach it to the loader frame, completed the job.

A handy scraper operating from the hydraulic lift of this tractor was made by an Illinois farmer. The curved frame which holds the blade at the proper angle for each job is made from a section of steel wheel. The blade was made from two discarded grader blades.

HARDSURFACING

Hardsurfacing farm implements extend their life from three to five times. Hardsurfacing put on with a welder is easy either with a hardsurfacing powder, applied with the arc using a carbon electrode, or with a standard hardsurfacing electrode, such as Abrasoweld.

This picture shows a plow share hardsurfaced with Surfaceweld powder which is extremely resistant to the abrasive wear of sandy soil. It's also easy to apply to thin edges, such as on cultivator sweeps.

PLANS AND DESCRIPTIONS like these are available.

and CONSTRUCTION jobs and for shop projects at school.

BUILDING NEW EQUIPMENT

With time available in the winter to think, plan and build, it is now possible with the aid of an arc welder to create time and money-saving equipment in preparation for next year's busy season.

At right is shown a post hole digger made from a discarded Chevrolet differential by a farmer in Illinois. The frame came from scrap pipe and angle iron off the farm's scrap pile. The auger itself is a section of a screw conveyor found in the junkyard.

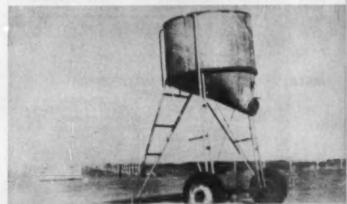
The portable grain and feed bin in the next picture was built by a farmer in South Dakota. The 60-bushel tank was taken from an old combine. It was mounted on a homemade undercarriage made from a lengthened auto axle and miscellaneous lengths of scrap pipe. The portable bin can be filled directly from the elevator and can pour grain directly into a grain cleaner or grinder for processing, or into feeding troughs or conveyors.



Whether in the farm shop or school shop, projects for use in the home are always popular in the winter. At right is a useful desk, simply made with a welded angle iron and bent tubing. Plywood inset top and three drawers made of wood, screwed to the framework, completed the job.

OF HUNDREDS OF PROJECTS
See next page.







BOOKS ON FARM PROJECTS AND FARM WELDING

FARM ARC WELDING Details, bill of materials, pictures and descriptions for repairing and building nearly every type of farm tool and equipment. Every item actually made or repaired on a farm. Edited by Professor Morford, Dept. of Ag Engineering, Iowa State College. 456 pages, 724 illustrations, hard cover. FARM EQUIPMENT WELDING PLANS Detail plans, pictures, bills of material and suggestions for 44 pieces of farm equipment. Each item built in farm or school shops. Plans prepared by Vo-Ag Service, University of Illinois. 99 pages, 8½ x 11, punched for notebooks. ARC-WELDED PROJECTS FOR SCHOOL SHOP Shop-tested welded metal projects for industrial art shops 25 useful projects with wide interest for students. Each project has photograph, bill of material, instruction suggestions and detailed plans. 46 pages, 8% x 11, punched for notebooks. Price, each 50c. ARC-WELDING LESSONS FOR SCHOOL AND FARM SHOP Most widely used high school text for teaching students or farmers basic skills of farm welding by Harold L. Kugler, formerly Teacher Trainer, Kansas State College, now Vocational Educationalist, U.S. Government. 343 pages, hard cover. Price, \$1.

ARC WELDING MANUAL OF INSTRUCTION

A brief text, explaining in simple language for high school and other beginning students, the fundamentals of are welding. Contains all instruction necessary to learn basic are welding. Written by experienced welding teachers. 44 pages, 8½ x 11, punched for notebooks. Price, 50c.

METALS AND HOW TO WELD THEM

Explains in clear, simple language the internal structure and properties of commonly used metals and explains how to weld them correctly. Covers correct procedures for welding steels, cast iron, and non-ferrous materials as well as hardsurfacing. 322 pages, hard cover. Price, \$2.

LEARNING FARM WELDING

A series of six film strips prepared in co-operation with the Vocational Agricultural Services of the University of Illinois. Black and White, complete with text and questions directly on each strip. 40-45 frames in each. Price per set,

SPECIAL VO-AG WELDING LIBRARY

All seven of the items listed above. Price per set, \$10.

Total \$

()\$

Make checks payable to: James F. Lincoln Arc Welding Foundation

Tear off entire page and mail to:

THE LINCOLN ELECTRIC CO. **DEPT. 4231** CLEVELAND 17, OHIO

IMPORTANT

The Lincoln Electric Company offers a 25% educational discount to all schools purchasing Lincoln equipment for shop training programs.

AC-180-S Perfect for Small Shop

Your boys will be using these machines long after graduation. They weld, cut, braze, pierce holes, even thaw frozen pipes. Ideal for welding lighter materi-

ils. Full 30-180 ampere range. Operates on single-phase power. No special hook-up needed. Complete with accessories.

Get AC and DC **Use LINCOLN IDEALARC 250**

Even shops supplied with only single-phase current can get both AC and DC current from this one machine ... just by flipping a switch. You need both



for best welding on all types of metals which require different electrodes. Welds carbon, high-alloy and stainless steels, aluminum, bronze, cast iron.

Use Gas? **Get LINCOLN** IDEALARC TIG

Most versatile machine for shop using heliarc, other gas processes. Use it for AC or DC welding with stick electrodes, too. Fully equipped machine includes

high frequency with automatic water and gas valves plus normal controls for regular welding. You can't train young men on better equipment.



THE LINCOLN ELECTRIC CO.

World's Largest Manufacturer of Arc Wolding Equipment

Please send me more i	nformation	on
AC-180-S machine		
☐ Idealarc 250/250 mi	achine	
☐ Idealace TIG machin		

Send information & items ordered to:

Name	*				 			×			*							 		 								*		 * >	× 1	 	 		
School					 			*		*	*				*			 						×	*		8	* 1					 	 . *	,
Address	*	*			 				*	*	*	*						 . ,	. *						*	*		*				 . 1		 	
Town .	*					*	*	×						*		 	 		*		×	*	*	S	ha	rti								 	

HOT TIPS . . .

(Continued from Page 16)

Polytechnic Institute, larger amounts of fat in broiler rations alter the dressing percentage. The fat level of rations affects giblet weight, and also the amount of fat in the carcass of birds. Because of losses in dressing this poultry, processors are concerned.

Researchers are now trying to find rations which give broilers a desirable finish without depositing excess fat in the carcass. But, chicken still has the lowest percentage of fat to protein present than any of the common meats.

Are they, or aren't they? The belief that pea-combed broilers are heavier may not be true. Research on 11,062 broilers at Hubbard Poultry Breeding and Research Farms in Walpole, N. H., shows broilers with single combs were heavier by 3%. Dr. James H. Smith, Hubbard Farms geneticist compared 7,439 pea and 3,623 single comb broilers from three separate hatches. Single comb broilers averaged 3.59 pounds and pea-comb broilers, 3.48 pounds.

This difference can be quite an advantage in large broiler flocks which have a high percentage of single comb

birds.

Geneticist Smith estimated that the more rapid growth of broilers with single combs is due to a complex interaction of genetic factors.

Adult body size of parent stock is an important factor in getting fast-growing broilers. Researchers A. W. Nordskog and J. W. Strain of Iowa State University point out that the growth of the offspring is also related to rate of egg production in parents.

Large-bodied birds tend to lay at a lower rate. If production dips below 60%, the cost of producing hatching eggs may be too high. If it exceeds 60%, the broiler's growth rate will probably be inhibited. Hens producing 60% will usually be large enough, and will produce enough eggs, to pay off in the broiler enterprise.

The last four weeks of the feeding period are required to produce a desirable yellow pigmentation in broiler chicks, maintained free of coccidiosis, according to a University of Tennessee poultry experiment.

Xanthophyll-depleted chicks, which are fed a basal diet containing 10 milligrams of xanthophyll per pound, from natural feedstuffs, are satisfactorily pigmented after a four week feeding period.

Xanthophyl is a well-known yellow carotenoid pigment that puts yellow color in skin, beaks, and shanks of chickens. It originates in yellow corn, corn gluten meal, alfalfa meal, and xan(Continued on page 22)

a Bright Future

FOR FARMERS WHO RAISE

DEKALB CORN

"Son, look closely at this beautiful field. Wonderful crop, corn. Each of these big stalks came from a single kernel and at harvest will reward the planter with an ear of about a thousand kernels—a thousand-fold return! Isn't that pretty wonderful—that each kernel put in the soil may grow to a thousand? This is no ordinary corn. Long before you were born; yes, even when your grand-father was young, well-experienced DeKalb corn men were spending their lives improving the crop. Because of that, lads like you can find an ever brighter future as corn growers.

"This is DeKalb corn, Son. When you become a farmer DeKalb Corn will be here for you. Meantime DeKalb corn breeders will continue to improve it so you may raise even better corn than you and I are seeing in this field. Isn't that a fine thing—that expert corn breeders keep right on working so you, as a corn grower, may have a bright future?"



Planted by More Farmers for 22 Straight Years Than Any Other Brand

"DEKALS" is a Brand Name. The number is a Variety Designation

DEKALB AGRICULTURAL ASSOCIATION, INC., DEKALB, ILLINOIS
Commercial Producers & Distributors of DeXalb Seed Corn, DeXalb Chix and DeXalb Hybrid Sorghum





Use Buffalo Turbine Equipment For



Model CHS

- Soil Stabilization
- Row Crops
- Seeding Shade Trees
- Enzyme Deadoriza-

BUFFALO TURBINE

ricultural Equipment Campan; 50 Industrial St., Gowanda, N.

READY TO ASSEMBLE



KITS EASY TO ASSEMBLE NO EXPERIENCE REQUIRED

The only saddle in the world that anyone can comp your horse and you too! SAVE BIG MONEY! Double rigged, 15" seat, all parts pre-cut, including stirrups. Cheyrell, full size fenders, easy instructions Write today-FREE 112 PAGE CATALOG.

TANDY LEATHER CO (Since 1919) O. BOX 791-FR FORT WORTH, TEXAS HOT TIPS . . .

(Continued from page 21)

thophyll concentrates used in poultry diets.

Particular precautions should be taken to control intestinal coccidiosis when well-pigmented broilers are de-

Solar, windowless, or conventional? This is the big question in broiler housing today. To answer this question, Tennessee Departments of Agricultural Engineering and Poultry conducted trials using a solar house with air intakes and roof projection for shading the solar windows during summer months: a windowless house which excluded natural light, permitting light control by artificial sources; and the conventional house, equipped with corrugated plastic windows, providing ventilation by removal of windows and panels.

The trials ran through fall, winter, spring, and summer, and what surpris-

ing results!

The average growth rate in the windowless and conventional houses were about the same, while average broiler weight was lowest in the solar house. Mortality rate was low in all three houses, and differences in efficiency of feed utilization were insignificant.

So, what do you think: solar, windowless, or conventional?

A new ventilating system is incorporated in a poultry house designed at Michigan State University. "The Michigan Poultry House" heats incoming air in an attic under a heat absorbing roof and then it is used during cold weather for ventilating purposes. With a laying hen population of one bird to 1 square foot, there has been satisfactory continuous production and the litter has been kept dry.

These houses have come into use on poultry farms in Michigan and adjoining states in the last two years, and in this area, the Michigan Poultry House has gained popularity over the houses with down-draft ventilating systems, which suck air through the layer of manure and bedding, pulling moisture along with it. With the down-draft system, there is a reduction of moisture of 10% or more.

If you are interested in further details, concerning the Michigan Poultry House, write University of Michigan for Michigan State Circular No. 736.

Contract farming won't necessarily become widespread throughout agriculture, says Gerald E. Korzan, an Oregon State University agricultural economist. The broiler industry was "ripe" for contract farming, with financ-(Continued on page 23)



SEED POTATO CERTIFICATION-520-S STATE OFFICE PLDG., ST. PAUL 1, MINN.

HOT TIPS . . .

(Continued from page 22)

ing one of the chief reasons.

Because chicks were not adequate security for a grower seeking a conventional loan, feed manufacturers or poultry processors offered a contract and advance capital. Some growers who jumped into this mushrooming business needed chicks, feed, medicines, other supplies, and most of all, an assured market.

Contract farming offered these advantages to the broiler industry, but livestock businesses were, and are, in less need of contract arrangements.

Korzan believes that contract farming is a good thing when it benefits the farmer as well as the others concerned.

As a result of intensive promotional activities by the Institute of American Poultry Industries and the USDA's Foreign Agricultural Service, most of our poultry meat exports are going to Western Europe.

Consumers are taking to the American ready-to-cook poultry products the way children take to ice cream. European poultry is still mostly a by-product of the egg-producing industry. It's still sold in undressed form.

USDA's poultry inspection and grading program also play a role in aiding our export programs, by inspecting all poultry meat moving into foreign commerce.

Because of this, it is possible for the foreign buyer to get the quality product he wants by ordering on the basis of USDA quality grades.

Broiler prices are going down! If heavy placement continues (10% above last year) at the same pace in the

next few months, prices will continue to go down, says Everette Mackey, University of Kentucky Co-Operative Ex-

tension Service specialist.

He reports that a poultry survey group estimated a 13 cent a pound average price for the October-December quarter. The same group predicted a 14 cent a pound average for the Southeastern area the first half of 1962, provided the industry holds its expansion to some 4% above the 1961 levels.

what's coming up

October 29-November 1. National Agricultural Chemicals Association, 28th annual meeting, The Homestead. Hot Springs. Va. November 2-3. Pacific Northwest Plant Food Association, annual convention, Hotel Gear-

November 5-9. National Association of County 4-H Club Agents, annual meeting, Na-

tional 4-H Center, Washington, D. C. November 17-23. National Farm-City Week. November 26-30. National 4-H Club Congress, Chicago, Ill.



TAKE YOUR PICK OF THESE VALUABLE FILM STRIPS!

\$5.00 each or Albers Quality Control Circles from Suckle, Calf Manna, Sho-Glo or Spur bags

You receive ...

- * 15-MINUTE COLOR FILM STRIP WITH RECORD
- * 25 COPIES OF MATCHING 36-PAGE TEXTBOOK

Add new interest to your beef, dairy and sheep meetings with these Albers film strip sets. Every phase of selecting, fitting, and showing livestock to the winer's circle is covered in detail. You'll show them to beginner and old pro alike!

The beef set is a good example. Produced with the assistance of a professor of Animal Husbandry at a leading state college, it features the personal experiences of more than 100 breeders, feeders and herdsmen – representing all major breeds in every cattle-producing area. This full-color film strip, 15 minutes in length, comes complete with dialogue

record. And to supplement your presentation, you'll also receive 25 copies of the new fact-filled 36-page Albers "Selecting. Fitting and Showing Beef" textbook. Each set-film strip, record and 25 books —is yours free. Send for as many as you like. For each of the first 2, simply enclose 40 Albers Quality Control Circles from Suckle, Calf Manna, Sho-Glo or Spur bags. Or get all 3 for only 100 circles. You'll find many heads-up livestock men in your area relying on these Albers feeds for top results. See them—start collecting your circles now. You'll have your own film library before you know it!

Look for this Quality Control Circle-and mail your coupon soon!



ALBERS MILLING COMPANY, Dept. CA-81
1016 Central Street, Kansas City 5, Missouri
Please send the FREE "Selecting, Fitting and Showing" strip set(s) checked below, I enclose 40 Albers Quality Con Circles or \$5.00 for each film.

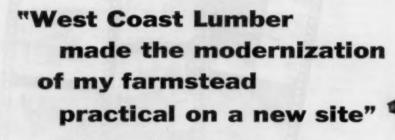
- ☐ "Selecting, Fitting and Showing Beef"
- ☐ "Selecting, Fitting and Showing Sheep"
- "Selecting, Fitting and Showing Dairy Cattle"

Name _____

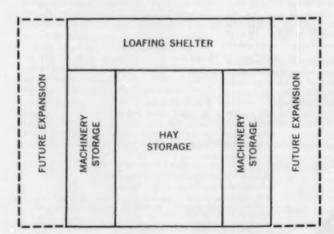
Town _

State

hart, Gearhart, Ore.



says R. E. "BOB" ALFORD Clackamas County, Oregon



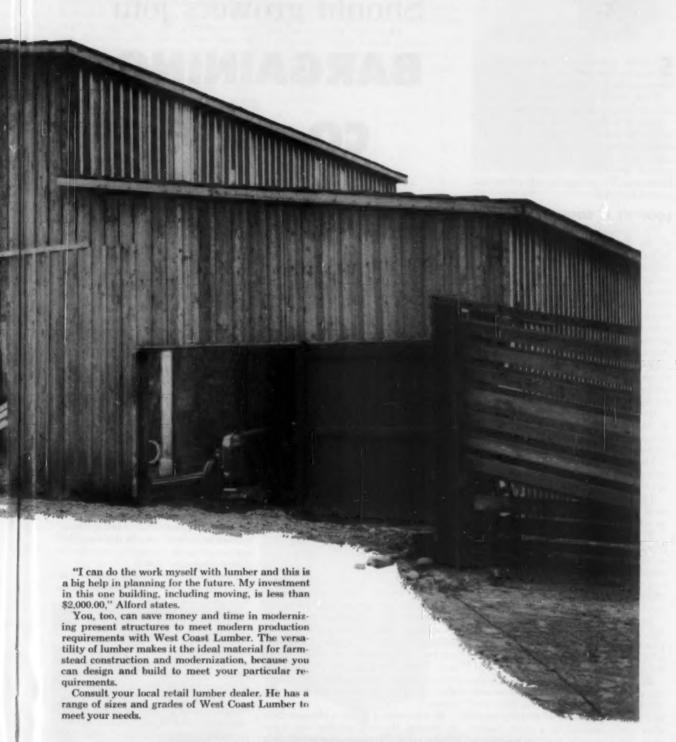
"I'm starting from scratch on a new farmstead site, and this can be expensive. To save money, I bought and moved a 75' x 75' utility building to my new location. This will be the hub of my cattle production when my layout is completed. In re-assembling the building to become my feeding barn, I also used West Coast Lumber to build in a modern labor saving arrangement for hay storage and feeding. I have allowed ample space for machinery storage.

"My present loafing shed extends across the back of the barn, but future plans call for extending the width of the barn to include a loafing shed along each side. West Coast Lumber is included in future expansion plans, for the construction of my new home and other buildings on this new location.

For farm building information, write Box 1003

WEST COAST LUMBERMEN'S ASSOCIATION

1410 S. W. Morrison Street, Portland 5, Oregon



WEST COAST LUMBER

WEST COAST DOUGLAS FIR . WEST COAST HEMLOCK WESTERN RED CEDAR . SITKA SPRUCE . WHITE FIR

Should growers join

BARGAINING CO-OPS?

By PAUL ROY*

Suppose a group of broiler growers came to you and asked your advice about starting a bargaining co-op.

What would you tell them? We hear a lot about bargaining co-ops these days some of it sounds good, but a lot of it is "not so good." Co-ops have been officially organized in Arkansas, Alabama, and North Carolina and other such groups are being contemplated in Louisiana, Texas and in other broiler producing states.

LOOK AT IT BOTH WAYS

The economic squeeze on all segments of the broiler chicken industry has brought fresh attention to the question of bargaining power of contract broiler growers. Since most broiler chicken contracts are from brood to brood, any drop in prices and net returns to the broiler dealer or integrator is usually reflected in the dealer offering lower payments on the next brood. Actually, this is reasonable for the dealer-integrator since he must protect his own economic interest. A bankrupt dealerintegrator provides little comfort to contract broiler growers.

However, the point to explore here is the exact power which bargaining co-ops can provide contract broiler growers.

The main points to consider in analyzing broiler bargaining co-operatives

1) These co-ops are incorporated under each state's co-op statutes the same as other types of co-ops.

2) Bargaining co-ops may involve other functions besides bargaining such as buying litter, butane gas, and other supplies co-operatively. Also, the co-op and the dealer may bargain over many items dealing with the production and marketing requirements of the grower.

In many cases, the dealer can transmit his requirements and obtain compliance much better if done through and with the co-op's backing rather than having the fieldmen giving "orders."

3) Bargaining co-ops in broiler chickens are organized primarily to meet with the dealer-integrators and bargain over the rate of payment. If there is more than one contractor in a given broiler area, the economic need to bargain is obviously less than where there is only one integrator. In cases where two or more integrators are present in an area, growers customarily go shopping individually for a better contract.

4) Dealer-integrators are not legally

bound to sit-down with the contract growers and bargain on anything. It is believed that California is the only state where it is a violation of its state law for a dealer-integrator to engage in unfair bargaining methods. This law was only recently passed and has not been tested in the courts yet.

5) Contract growers are very limited in what they can gain from bargaining. If they succeed in getting a very favorable contract, the dealer-integrator may see his costs go up and suffer in the economic struggle with other integrators who offer less favorable con-



If the co-op does not produce some immediate results, the growers become disgruntled and fail to support the co-op in the long-run. Contract growers have to recognize that broiler prices are determined primarily within a national market and, secondly, by local supply and demand conditions. Thirdly, the rate of payment to an individual grower also depends on his production effi-

6) Although it is not a pleasant item to discuss, the fact remains that some dealer-integrators may attempt to break up the co-op before it gets started by cutting off those growers who take the leadership in forming the co-op. They may use other varied techniques to discourage co-op organization. It should be pointed out here that these dealer

techniques are usually perfectly legal and no laws are being violated in so doing. This is true because agricultural workers, contract growers, etc., do not have the same protection from unfair employer bargaining practices as does non-agricultural labor under the Wagner Act (the National Labor Relations Act of 1935 as amended by the Taft-Hartley Act and the Landrum-Griffin Bill). Whether agricultural labor should have this federal protection is a question for the U.S. Congress to decide.

7) The record of accomplishment of broiler bargaining co-ops so far has been "fair." While rates of contract payments have not been altered substantially, most dealer-integrators contacted have sat down with the growers and some improvements have been made although not of a major nature.

8) The main problem faced by broiler bargaining co-ops today is being strong enough in its local area so that bargaining power can be brought to bear on the dealer-integrator(s).

How many of the contract growers in a country or state a co-op should have to be effective is a hard question to answer. It depends on many factors such as: a) Is the dealer able to produce broilers on his own? b) Are non-member growers available to contract with? c) Are competing dealers being bargained with? and d) What is the best short-run vs. long-run course of action?

It stands to reason that if a broiler co-op controls a majority of the broiler chicken volume, it can threaten to shift its entire membership to another integrator assuming that integrators are actively competing among themselves.

9) Another major factor facing broiler

^{*}Paul Roy is an agricultural economist at Louisiana State University.

bargaining co-ops is legalistic bargaining. So far, on one is legally bound to bargain with contract growers. If the dealer does bargain, he is doing it either for moral or for economic reasons or both. Some have proposed "state" laws instead of "federal" laws to compel dealers to recognize broiler bargaining co-ops. However, since broiler chickens are a major interstate commodity, it is unlikely that "state" laws would be applicable.

10) The other major problem facing broiler bargaining co-ops is one dealing with the leadership and membership of these co-ops and the economic information they might possess and utilize. In other words, the co-op leadership should be cautious not to raise the hopes of the broiler grower-members too high and/or make unsound contract demands on dealer-integrators. Unlike some non-agricultural employers, the dealer-integrator is in a vicous competitive struggle where ½ cent a pound can mean his success or failure.

In conclusion, it would seem that the broiler bargaining co-op is a healthy development and one that might spread. These co-ops can actually help themselves and help a dealer-integrator in many ways rather than only hurt him. It depends on the attitude of both parties as they approach the bargaining table, if they approach it at all.

vo-ag news

THE WALLS HONORED

A fitting tribute was paid Jim Wall, NVATA's first full-time executive secretary, and his wife, Georgia, at the annual FFA banquet of the Waverly, Neb., chapter. Officers called them to the stage before an audience of 300 and presented them with gifts in appreciation.

Among those in attendance were 33 FFA members whom Jim had guided to state farmer degrees. To climax the evening for the Walls, Connie, their attractive 18-year-old daughter, was presented as Waverly's Chapter Sweetheart.

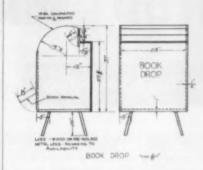


Dennis Swanstrom, Nebraska FFA Association president, and past Waverly FFA chapter president, is shown presenting Jim Wall with a luggage set and Georgia with a musical jewel case.

VO-AG TO THE RESCUE

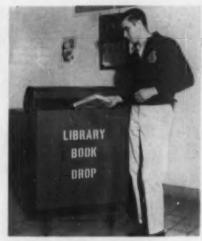
What librarian does not have problems with overdue books. The librarians at North Syracuse High School in New York state were no exception. But with the aid of the Future Farmers of America and their vo-ag teacher, the problem has been greatly alleviated.

The senior high school library is located on the third floor—too far for high school students to walk to return



books. Different gimmicks were tried but nothing worked until a postal-type box was used in the main corridor of the school. It is directly in front of the main doors, where most of the buses are unloaded.

The price of a metal postal box made



This library book drop was a ve-ag project that helped solve the problem of overdue books.

the idea seem impractical. However, with the co-operation of the teacher of vocational agriculture, Donald Watson, who drew up the plans, and with some of his students, who built the box, the library now has a wooden book drop, attractively painted in blue and white—the school colors.

Coming Next Month Audio-Visual Issue



COUNTY AGENTS STUDY MARKETING

46th Annual NACAA Meeting

About 1500 county agents and their families had

the time of their lives in New York City September 10-14;

Emphasis was on marketing, with a host of excellent speakers.

N that famous day of the first farm demonstration by the "lonely, friendly Squanto," who showed the Pilgrims how to "plant ther corne," there was no need for marketing information. The people were hungry. Their problem was producing enough food and fiber for their own needs.

But during the week of September 10 in the year 1961, more than 1500 county agricultural agents and their families from 48 of the nation's 50 states learned that today's farmer is in almost as sad a plight from lack of marketing know-how as the early Pilgrims were from their ignorance of how to grow corn.

Theme of the 46th annual meeting of the National Association of County Agricultural Agents, held September 10-14 at the Waldorf-Astoria Hotel in New York City, was "Marketing in Action."

TRIERWEILER ELECTED

Bernard H. Trierweiler, Torrington, Wyo., on Tuesday was elected president of the association. He was moved up from vice-president to succeed Howard H. Campbell, Mineola, N.Y.

Paul Barger, Waterloo, Iowa, was named vice-president, and Joseph S. Thurston, Greensburg, Pa., was reelected secretary-treasurer.

Stanley Hale, Norwich, Conn., was elected a director for the northeast region to succeed Roscoe N. Whipp, Rockville, Md. S. Glenn Ellenberger, Allentown, Pa., was named regional director.

Elmo V. Cook, Austin, Tex., was elected southern region director, replacing Robert W. Schroeder, Pine Bluff, Ark.; W. B. Collins, Maysville, Ky., was designated regional vice director.

Campbell was made a member of the executive committee. Other directors are: George L. James, Greeley, Colo., western region; Jonathan B. Turner, Vandalia, Ill., north central region; and



Top left: 1960-61 Pres. Howard Campbell, N. Y. Ext. Dir. M. C. Bond, and Dean Charles Palm, Cornell, preview the convention program. Right: Officers and directors for 1961-62. Seated, Pres. B. H. Treirweiler, Torrington, Wyo.;



Vice-Pres. Paul Barger, Waterloo, Iowa; Sec'y Treas. J. S. Thurston, Greensburg, Pa. Standing: Directors Stanley Hale, Norwich, Conn.; Elmo V. Cook, Austin, Tex.; J. B. Turner, Vandalia, Ill.; George L. Janes, Greeley, Colo.

E. N. Stephens, Pensacola, Fla., south-

ern region.

"Neglect of marketing is a contributing factor in the diminishing share the farmer has received of the general prosperity elsewhere in the nation's economy," Phillip Alampi, New Jersey secretary of agriculture, told the agents.

"At heart, farmers love to produce, but they've been inclined to resist new practices calling for departures in mar-keting," he said.

Alampi complimented the county agents for their work with farmers but pointed out that their effectiveness in the field of farm marketing will depend on how well they are grounded in the fundamentals of buying and sell-

ing farm products.

"Let's have more practical marketing research and more instruction in practical marketing at the college level. Let's establish closer relations with the food industry and join hands in getting across to the farmer a realization of the urgent need for adjusting promptly to the tremendous changes which have occurred in our food markets," he concluded.

Alampi was a member of a panel on "New Horizons in Marketing." John Carew, professor of horticulture at Michigan State University, was moderator.

NOW IT'S "TAILOR-MADE"

"Intense competition among stores for the consumer's food dollar, at its highest peak in history, is leading to greater demands on the farmer for more 'tailor-made' products. This 'product specification' has both good and bad points," Prof. Herrell DeGraff of Cornell University told the annual meeting.

Total efficiency of food production and distribution is increased, and the consumer receives more satisfying products as a result, he said. But such trends also are "merely another rat race" in which the technologically less-adjusted segment of agriculture-typically our smaller and less-organized producers are progressively losing out.

"Upholding quality standards and building consumer satisfaction is the only way to build sales and increase profits in marketing farm products, Gerald Achenbach, president of Piggly Wiggly Sims Stores, Inc., explained.

The greatest favor that county agents can do for fruit and vegetable growers Mr. Achenbach reminded them, is to convince growers to keep the product that won't sell at home. Fruit and vegetable growers are only cutting into their own profits made from quality produce when they put poor merchandise into retail channels.

Not only do growers help to break down the price on their good quality fruits and vegetables, Achenbach



County Agents Norman Smith, Mineola, Nassau County, N. Y.; Earle Wilde, Liberty, Sullivan County, N. Y.; M. C. Bond, extension director; Dean Charles Palm, Cornell and Don J. Wickham, N. Y., commissioner of agriculture.

pointed out, but they are also jeopardizing their future markets. Truck farmers will have to send quality products to market or run the risk of having the frozen food industry take over their customers

'To achieve a higher return for their labor and investment, farmers need increased market power," Dr. Charles E. Palm, dean of the college of Agriculture, Cornell University, told the

Sixty percent of consumer costs are charged to marketing, he said. Farm costs, he added, "reflect the higher prices paid by industry for labor and materials."

NEED MARKETING EFFICIENCY

"Efficiency in marketing, distribution, and utilization of agricultural products must be developed to match the ability to produce," Dr. E. W. Janike, associate director of agricultural extension, University of Nebraska,

Dr. Janike, chairman of the extension

committee on organization and policy of the American Association of Land Grant Colleges and State Universities, said agricultural marketing problems, a main concern of the convention, confront the co-operative extension services, "with a real challenge." He added confidently his belief that "we can meet it."

R. Sargent Shriver, director of the Peace Corps, told the group that people (Continued to page 32)



Above shows W. G. Vinzant, Portales, N. M., left, chairman 1962 annual meeting committee, conferring with George L. James, Greeley, Colo., Western Regional Director. Photo below shows I-r, Past Presidents Ed Bay, Springfield, Ill.; Rex Carter, Uniontown, Pa.; Joe T. Brown, Concord, Mass.; Leonard J. Kerr, Memphis, Tenn.; Marion Bunnell, Yakima, Wash.; Fletcher Farrington, Dadeville, Ala.; R. H. McDougall, Butler, Pa.; A. F. MacDougall, Westford, Mass.; Dr. Herrell DeGraff, Cornell, and Carl Rose, Fayetteville, Ark.





news and views by George F. Johnson

ACTION PICTURES, packaged for educational use, have been with us for almost four decades. First, they were 35mm silent films, then 16mm sound, and since the mid-thirties they have been sound and mostly in color.

We have come a long way in perfecting both the reproduction and the recording of natural color and natural voice on film. Undoubtedly, the finest quality films technically are the films most recently made. But, we face an enigma (to me at least). Reports from some states indicate a leveling off in the use of educational ag films. USDA reports are likely to confirm this trend. Extension visual specialists and vo-ag leaders seem to agree that the use of ag films is apparently not keeping pace with the new technology in film making. Some state extension services report that volume of usage per film in meetings has leveled off but that more films than ever are being circulated so that total volume has increased. 4-H has been an ever increasing outlet for good movies, contrary to the trend in adult meetings.

Why has the use of motion pictures outside the classroom apparently leveled off in spite of the population explosion, the broadening of ag extension into suburbia, and the better general quality of most available films. The first answer you hear is "television." Educational information on TV is fresher and more immediate. Television, they say, is a "continuous movie." Certainly movies at a meeting are not the attraction they were in pre-TV days. On the other hand, ag leaders and teachers are using movies more frequently as a segment of their

TV programs.

Another trend is to hold fewer meetings and instead to mass communicate more information via the press, TV, and radio. This places a physical limitation on the extensive use of films in meetings. Enigma No. 2 is this: In spite of all trends many county extension staff members and probably vo-ag teachers too, are using more films than ever before largely! Use of their unusually fine quality. And to compound the confusion some land-grant college extensions.

sion services are expanding their motion picture productions while others are reducing this effort.

Who is right and where are we really headed? My observations and experience covering over 35 years—in the production, the servicing, or the use of ag motion pictures-leads to the conclusion that, as the tide, there is an ebb and flow element in the use of movies. This applies to both the individual ag workers and to institutions. I know individuals who have used movies enthusiastically in ag work for five or more years, and then discontinued their use almost completely for a time. I know of institutions which have adopted a film library service only to drop it after eight or ten years and eventually take it up again. In spite of all this, most of the land-grant institutions have developed and maintained an expanding audiovisual library service including many fine ag films so that the opportunity for individual workers to secure good films has never been better.

To continue with our question: Is our present leveling off in the use of ag films merely a temporary pause in a long, upward sweep? Or, must we face up to the fact that color slides for the individual meetings, and television for the masses are more practical media?

I am convinced there is a great future for ag films but we must move in the direction of depicting more dramatically the relatively stable segment of ag subject matter, and we must make possible a faster pr fuction and more intensive use of v y practical films depicting our ever-changing ag practices. Too many present-day films are somewhat out-of-date or anti-climax before peak use is possible. They are often rather slow getting out to the grassroots through the usual meeting route. This fact leads me right into television again. Perhaps, the most hopeful expanding opportunity for ag movies is TV. Several states are now increasing their facilities for the production of films pri-marily for TV use, with secondary or follow-up use in meetings or in classrooms. Whether these films should be

"shorts" or "longs" (3 or 14 minutes or more) is not a settled matter by any means. One large ag state is pushing TV movie shorts and supplying them regularly to 14 or more TV stations. Another progressive land-grant institution according to reports, is planning a \$30,000 expansion of its movie production personnel to make full length ag movies (14 to 28 minutes) initially for TV use, but later for meetings.

To add to the movie puzzle, we could raise the question of 8mm sound films and their place in both vo-ag and extension. Some say 8mm will eventually replace 16mm films and greatly broaden the use of ag educational films due to lower costs and lighter projectors. My guess is that 8mm films will find their own place and make their own unique contribution over and beyond that of the present 16mm films.

Perhaps the only conclusion we can come to here is that more research in this area of the non-classroom use of educational films is definitely in order. Certainly, there must be a way through surveys, if not research, to turn this motion picture enigma into an understandable phenomenon at least. Mr. Reader, can you throw some light on the subject?

WHAT'S NEW

The Arlington five-way Easel combines the usual paper pad presentation with a blackboard and provides for flip charts, card charts, and poster presentations. All functions are possible using this portable easel which folds down to 29 x 40 x 1½ inches and weighs 20 pounds. It is 72 inches high when fully extended. You'll receive full information from Arlington Aluminum Company, 19011 W. Davison, Detroit 23, Mich.

The Graflex Galaxy 16mm motion picture projector represents many new features in sound projector design. A new, high intensity lamp eliminates condensers and external reflectors. Single-lever, sound head threading makes this operation extremely easy and simple. The projector is single-case with the speaker mounted in the left-off cover. For more details write Graflex, Inc., Rochester 3, N. Y.

A "keystone" eliminator can now be provided by Da-Lite Screen Company with their new tripod and wall screens. This device holds the top of the tripod screen 2 to 18 inches out from the vertical, for optically correct overhead projection. Sturdy, inexpensive brackets can be provided to turn wall mounted screens into overhead projection screens. Get details from Da-Lite Screen Company, Warsaw, Ind.

booklet-bulletin reviews

Publications listed on this page may be obtained free of charge by sending a post card request to the company or manufacturer named. Be sure to say you saw it in County Agent & Vo-Ag Teacher.

Audio-Visual Aids

Economic subjects of importance to the farmer are dealt with in three USDA motion pictures released through United World Films for educational use. The Sign of Dependable Credit emphasizes the need for specialized credit to provide short term loans for farmers; Production Credit Does the Job explains the functions and operations of the Production Credit Association; The Big Gamble dramatizes some of the risks that are faced by farmers and the part played by the Federal Crop Insurance Corporation in helping farmers whose crops may suffer as a result of insect infestation or unnatural weather conditions. For information regarding the use of these films, write to the distributor, United World Films, Inc., (Government Dept.) 1445 Park Ave., New York 29, N. Y.

GUTHION

Use of Guthion insecticide in controlling major fruit pests is the subject of a new 20-minute color film produced by Chemagro Corp. Outstanding photography catches insects in the act of damaging fruit, and explains and illustrates the various stages of their life cycle. Featured are scenes in the country's top fruit growing areas.

The film is available for group viewing through any Chemagro office or sales representative. Main office of the company is Kansas City 20, Mo.

Chemicals FRUIT INSECT CONTROL

A new brochure on improved control of fruit insects has been published by Chemagro Corporation, manufacturer of agricultural chemicals. The brochure, in full color, illustrates major fruit insects which are controlled by Chemagro's Guthion insecticide. Included is a list of fungicides and other agricultural chemicals with which Guthion is compatible, along with a complete recommended usage chart. Guthion represents a new concept in fruit insect control. It can be used alone throughout the season for control of all major deciduous fruit insects. For your copy of this brochure, Guthion, write Chemagro Corporation, Kansas City, Mo.

BROCHURES ON ETHION

Two new brochures on the use of the pesticide ethion for control of pests on onions and beans, are being offered by Niagara. Ethion Controls Onion Maggot is a four-page guide describing properties of ethion and its use in effectively curbing maggots on dry and green onions. Ethion For Better Beans outlines the use of the chemical against Mexican bean

beetle, bean leaf beetle, two-spotted spider mite, and lygus bug on dry, snap, and lima beans. Copies of either booklet, or both, are available upon request to Dept. A, Niagara Chemical Division, FMC Corporation, Middleport, N. Y.

Crop and Soils SULPHUR AS A NUTRIENT

Many plants indicate their need for sulphur by leaf color, and in many instances a crop will not do well unless sulphur is used as a nutrient. A concise, illustrated discussion of this subject is being offered free in a new brochure Sulphur in Plants and Soils, by Texas Gulf Sulphur Company, 75 E. 45th St., New York 17, N.Y.

Livestock & Poultry PREVENT SILAGE ODOR

A new bulletin, available through Agriaids, Inc., points up the problem of silage odor and its control through the use of Silo-Joy. Unlike other preservatives, Silo-Joy is just as useful in corn and sorghum silage as in grass silage. Results of tests by county agents and vo-ag teachers are given with other pertinent information. To receive a copy of this bulletin, write Agriaids, Inc., Division of Flavor Corporation of America, 3037 N. Clark St., Chicago 14, Ill.

CATTLE FEEDING

A new booklet by Merck Chemical Division, of Merck & Co., Inc., is a guide to the most profitable methods of getting the most out of every feed dollar. Ready reference tables give space requirements for beef cattle, per head, in feedlot areas, in open shed or shade, and in box stalls. Management hints, including some on dehorning, castration of calves, vaccination, branding, proper equipment, transportation, and stress factors are itemized. Copies of Guide to Better Beef are free by writing Merck Chemical Division, Agricultural Products, Rahway, N.J.

BRAHMAN HYBRID CATTLE

A 23-page brochure offered by ABBA, includes answers to many questions on Brahman hybrid cattle: Why make a change to the hybrid? What about the cow-calf business? How do you start getting hybrid quality? Do hybrids pay off in the feed lot? With the answers to these questions, are tables giving comparative figures and statistics concerned with Brahman cattle breeding. To receive this brochure, The Brahman Hybrid, write American Brahman Breeders Association, 4815 Gulf Freeway, Houston 23,

Get acquainted with the New Products

on page 30

- Silage Distributor
- Crop Cruiser
- · Automatic Livestock Waterer
- · Transcription Player

Structures

REDWOOD FOR FARMS

California Redwood Association is offering a new booklet 20 Ways to Use Redwood on the Farm. Unlike most woods, redwood leaves no noticeable odor or taste in either liquids or solids, so it is ideal for storage. When used for animal shelters, it provides good insulation and stays weathertight. For many more ideas on the uses of redwood on the farm, write California Redwood Association, 576 Sacremento St., San Francisco, Calif.

BUILDING PANEL

Your farmers will be interested in Ag-Ply, a new plywood panel engineered to produce low-cost farm buildings. Typical uses include barn siding-sheathing, pallet bins, farrowing pens, poultry nests, feeders, drop boards, poultry building siding and lining, crates, shelving, range feeders, and range shelters. For details about the panel, including maximum allowable span and uniform load charts, drawings of typical installations and recommendations for finishing and fastening, write to Douglas Fir Plywood Association, Tacoma 2, Wash., for bulletin 61-130.

Tractors & Equipment

SPRAYERS

Sprayers ranging in capacity from 3 to 60 gpm with tank sizes from 10 to 1000 gallons—60 different models—are illustrated and described in three new John Bean catalogs. All Purpose Sprayers catalog covers smaller capacity including John Bean Trojan, Sparta, and Royalette models; Roylier High Pressure Sprayers gives details on the mid-range capacities; the models for big capacity spraying requirements are included in Royal High Pressure Sprayers. To obtain one or all three of these free catalogs, write John Bean Division, FMC Corp., Lansing, Mich.

Miscellaneous

SADDLE KITS

Tandy Leather Co. is now offering a 112page catalog on ready-to-assemble saddle kits. All the parts for the saddles are precut, even the stirrups. They have double rigged 15-inch seats, Cheyenne rolls, and full size fenders. For your catalog of easy-to-make saddles, write Tandy Leather Co., P. O. Box 791, Fort Worth, Tex.

CONVENTION REPORT . . .

(Continued from page 29)

with farm experience and training are on the "most wanted" list today in the lesser developed areas of the world. He called upon the county agents for their continued support in helping the Peace Corps contribute to solving the agricultural problems of the free world.

On the final day of the meeting, Prof. Robert B. Donaldson, Prof. P. Glenn Harr of Pennsylvania State University, and County Agent Duane G. Duncan collaborated to show the agents how the highly successful "Marketing in Action for Youth" program works in

Pennsylvania.

Dr. E. T. York, Jr., administrator of the Federal Extension Service, addressed the agents on the many challenges facing them in the years to come. He was followed by Frank J. Welch, assistant secretary of agriculture in charge of federal-state relations, who spoke on "Public Relations for Agri-

culture.'

The last major topic on the program before the annual banquet was a panel discussion on "New Challenges in Mar-keting for County Agents" with the following experts participating: Maurice C. Bond, Cornell University; Brice Ratchford, University of Missouri; T. K. Cowden, Michigan State University; Marvin Anderson, Iowa State University of Science and Technology.

Dr. T. K. Cowden, dean of agriculture at Michigan State, cautioned: "Our ability to produce food is one of our strongest assets in the current world situation."

Warning against neglect of "our responsibilities in production," he reminded: "We must know how to kill the bugs on the cucumber vines, If we don't we will fail (as farm advisers) regardless of other accomplishments.'

Dean Cowden complimented the county agents for having made "thou-sands of contributions" to the farm marketing program, largely by the "unspectacular, but effective, method of disseminating just plain factual information."

POPULAR TOURS

The well conducted tours through the marketing areas in New York City were outstanding features at the convention. Agents toured the financial district, Mercantile Exchange, and The Great Atlantic and Pacific Tea Company wholesale distribution center to mention a few. Agent's wives saw General Foods Kitchens and Food Service Kitchens of Pan American and Idlewild Airport and the children went through the American Museum of Natural History

The 1962 meeting will be held August 26-30 at New Mexico State University,

Las Cruces, N. M.

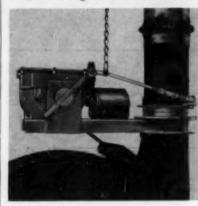
new ideas and products

SILAGE DISTRIBUTOR

With this new silage distributor, the farmer, without entering the silo, can fill it evenly from the ground.

This distributor features a unique ac-

tion, combining horizontal and vertical



motions which are both simultaneous and automatic. The silage is deposited in a circle around the silo walls without separation of corn, cobs, and leaves.

Designed for quick and easy installation, the only adjustment required is the length of the cable for varying silo heights. For further details, write C. Hudson Thompson and Sons, Inc., Dept. 104, R. R. #5, Springfield, Ohio.

CROP CRUISER

Tell the farmers in your area about New Holland's first self-propelled forage harvester. Just introduced after five years of testing and research, the Crop Cruiser features a 130-hp engine, an advanced speed-control system and a 130square inch throat.

The Crop Cruiser is equipped with a built-in knife sharpener in the cylindertype cutterhead, enabling you to sharpen the knives in less than five minutes. Another advantage is being able to open up



corn fields without running down any of the crop.

For the additional information you will want, be sure to write H. K. Luttringer, New Holland Machine Company, New Holland, Pa.

AUTOMATIC LIVESTOCK WATERER

The new all-purpose automatic livestock waterer now being introduced is designed for convenience and economical service. It features a fast-filling valve, and cast-iron bowl and base to withstand constant exposure in the barnyard. The 14-gauge galvanized jacket permits complete insulation of the base and bowl for low cost heating.

The waterer is equipped with mud



grates, two clean-out drains, and flexible hose with brass couplings for easy hook-up.

Our readers can obtain further information by contacting Pax Steel Products, Inc., of Coldwater, Ohio.

TRANSCRIPTION PLAYER

For your club meetings and classrooms, Audio-Master Corp. has created a high quality, up-to-date transcription player and P. A. System combination.

The Monophonic No. 88 contains a four-speed motor with a built-in 45 rpm



chuck, two loudspeakers, and special jacks for earphones and external speakers. The variable volume, bass, and treble controls permit you to adjust the tone as desired.

The specifications of this player assure you of high fidelity performance. Be sure to write Audio-Master Corp., 17 E. 45th St., New York, N. Y., for additional information.

county agents,

By VIC CAROTHERS



Oregon County Agents Association officers had some fun at their recent meeting when President-Elect William K. Farrell, Canyon City, doffed the traditional "crown presented during installation ceremonies. Other officers, left to right, are Ken Minnick, Corvallis, secretary-treasurer; Earle Jossy, Medford, vice president; Wayne Roberts, president; Wayne Roberts, McMinnville, assistant secretary-treasurer; and retiring President Palmer Torvend, Hillsboro.

NEW UTAH OFFICERS

Fullmer Allred, county agent of Box Elder County, was elected president of Utah Association of County Agricultural Agents at the annual meeting of the association. Also elected were Clair Acord, vice president; Robert Hassel, secretary; and Ernest Biggs, treasurer.

North Central Region Director of NACAA, J. B. Turner, center, is shown with Minnesota County Agents Dick Kunau, left, and Russ Gute. They mixed in some fishing with business at Little Pine Lake in Minnesota at the spring meeting.

STUDY FOR PROFESSIONAL IMPROVEMENT

Utah agents are going all out for professional improvement, according to a report made at the annual meeting of Utah Association of County Agricultural Agents. Four agents obtained their M. S. degrees during the past year; Wayne Rose from University of Minnesota, J. Reed Moore from Cornell University, and Norris Stenquest and Marvin Ogden from Utah State University.

Studying for Ph.D. degrees are Kay Bendixson at Michigan State University, and William Farnsworth at University of Wisconsin. Another agent, Wesley Maughn, has been granted leave to work for his Ph.D. degree at University of Wisconsin, while Grant Esplin has been given sabbatical leave to study for his M.S. degree.

In addition, five agents attended summer school at Fort Collins, Colo. Ray Finch attended the winter extension school at Georgia, and six agents participated in out-of-state educational tours during the past year.

This is an outstanding record for a staff consisting of 34 agents.



New officers of Maine County Agents Association are, left to right, James A. Robinson, central Aroastook county agent, vice president; Charles L. Eastman, Androscoggin-Sagadahoc county agent, secretary-treasurer; and Gilbert B. Jaeger, Knox-Lincoln county agent, president.



Cowley County (Kansas) Agricultural Agent, Charles W. Smith, left, and Tom Malcolm, superintendent of Maurer-Never Stockyards, Arkansas City, Kan., select cattle for the second annual Live Beef Evaluation School conducted at Mourer-**Never Packing Plant.**

HANDLING GALVANIZED ROOFING & SIDING

Easy to handle. Easy to apply and nail. What's more, strong galvanized steel sheets stay put and hold at the nail holes. For extra long service, specify heavily zinc-coated sheets such as this... "Seal of Quality" ...

FREE INSTRUCTION MANUALS!

write to Field Office AMERICAN ZINC INSTITUTE 324 Forry Street Lafayette, Ind., Dept. CA-10





RAISE MONEY

for your Group with PURE VANILLA

Don't be misled by big profit offers on imits PUPE VANILA sells feeter, corns you make and gains respect for your organisation.

Handle the best . . . M.K PURE VANISLA.

EARN \$50.00 . . . \$100.00, ar more, easily



SALESMAN WANTED

Several excellent territories open for complete line of proprietary animal health products. Write: President, Dr. LeGear, Inc., 4161 Beck Avenue, St. Louis 16, Missouri.

in summing up

Creeping bureaucracy

A T A MEETING on a midwest ag college campus several months ago, a cattleman told extension what kind of help he and his fellow ranchers needed most.

"Producers no longer have to be 'sold' on new ideas. We are ready for them. We are receptive to new and better ways and aren't reluctant to change methods if you can show us it will pay," he said.

"This means that the job of keeping farmers and stockmen informed will be greater than ever before," he added.

This cattleman expressed the need for farm business associations "which could supply technical assistance in record analysis, outlook and planning." (See "Big Problems Become Small," September issue).

"We have already established that farmers want to know," he continued. "Groups of not-to-exceed 25 farmers might be selected and organized—men who want to be part of a dynamic group interested in the problems of cattle feeding."

He said that extension specialists could make good use of their time serving as advisors to such a group, with an executive committee of the group determining the programs to be presented.

This straight-talking stockman said extension should have been offering this kind of help all along!

It would seem to me that this would indicate, at least, that farm people do not want extension to deemphasize farming problems.

There are some things going on in extension these days that would make Squanto's head feathers burn. I've heard some very inspiring oratory about what extension now is—in fact, as I listened to it, for a few moments I was actually taken in by it all. "Magnificent speaker," I heard a couple of people in the audience remark. Later I went up and asked them what they liked about the speech.

"Boy, did he have a delivery! He had some wonderful stories!" was the answer.

But that's all! They didn't really know what he was talking about.

Yes, one thing about extension—it's developed some terrific orators with impressive words and phrases. Some are very sincere and really believe in what they're advocating. Then there are the *empire builders*, whose strategy is as old as the hills:

If you tell people they "need" something long enough, they'll eventually believe it!

The fact that extension probably will circumvent farming's real problems in the future doesn't seem to register with people right away. The oratory is really spell binding! The effect lingers on. The people must realize that Big Government will solve all the COM-MUNITY problems, of which farming is only a small part! The bigger and more elaborate this "education" becomes the better!

We hear that county agents are going to be in charge of "depressed" areas. And also that some communities just plain resent being referred to as depressed! Thus extension efforts are resented.

The real depressed areas in rural America today are where they always were—on the farms. Cattlemen, poultrymen, dairymen—they're all crying for help. And extension is looking the other way.

Do you see what I see—a creeping bureaucracy replacing one of the most valuable, worthwhile services this nation has ever known? We've seen it at work in other areas of agriculture. Let's take a good look at the beast.

Carleton I. Pickett, executive secretary of the Massachusetts Farm Bureau Federation, recently referred to bureaucracy behind pesticide-use regulations. He said:

"One point that must be understood is the lobbying power of the bureaucracy, its methods, and its determination to sooner or later get what it wants.

"Lobbying is far better understood and practiced by Government than by registered lobbyists. They understand that it is necessary to persuade certain groups by meetings, newspaper editorials, and all other media which they woo assiduously, and on government time, as part of their job of 'education'

"Empire building is another facet of bureaucracy.

Any good administrative body that can't add more functions, more personnel, and more budget loses prestige." Pickett continued.

I'm for keeping extension the way it was supposed to be—only better! If there's no need for county agents, then they shouldn't take up valuable office space. There's only one way to determine what extension should be doing. Ask the people you've been serving how you can better serve. Don't try to shove something down their throats and then tell them how much they enjoy it!

It's not too late to come forth with the help that farmers really want. But time is running out!

Horsen & Berg

For the first time!

A Purified Toxoid

for protection against

ENTEROTOXEMIA

Clostroid D

Purified (cell-free), concentrated, detoxified culture filtrate of Clostridium perfringens, type D

2 cc. dose

A more potent antigen. Tested in sheep. Demonstrated to produce a higher antitoxin level in vaccinated sheep. Stable.

Less irritation at injection site, because of its being a purified product and concentrated into a 2 cc. dose.

Clostroid D is available through veterinarians. But, its newness means it may be in short supply this season.

Fort Dodge Laboratories Fort Dodge, Iowa



Producers of fine veterinary products since 1912

'Clostroid D' is a trademark.

This special, new-product message is being addressed currently to sheep raisers.

PURINA SALUTES ANOTHER "FARMER OF TOMORROW"



James McMechan displays his trophies and a few of the ribbons he has earned in 4-H and FFA.



"Farming is a good business"

-says American Farmer-Star Farmer

James McMechan, of Liberty, Indiana, can be called a "Farmer of Tomorrow" only because most of his future is ahead of him. Actually, he is a farmer of today. As a partner with his father, in the grain and livestock area on the eastern border of his state, he will market about 1200 hogs a year. He sees a challenge and a good future in farming.

James' success in farm projects began with his 4-H Club and Future Farmer of America activities. For nine years he carried an average of seven projects, won two Grand Championships and a Reserve Grand Championship in Union County. His ribbons, mostly blue, number around 75.

His achievements and leadership have earned local, state and national honors. Among other offices, he has been president of the local 4-H, president of the Junior Leaders, president of his FFA Chapter, president of the District FFA and president of his group at Purdue's short course. He was chosen Star Farmer in 1958 and American Farmer in 1960.

Purina salutes James McMechan on his leadership and achievements . . . on his well-planned future in agriculture.

There's a Purina Dealer near you. He is ready to help you with livestock and poultry feeding and management, whether you are interested in producing for market or the show ring.



FEED PURINA ... YOU CAN DEPEND ON THE CHECKERBOARD FOR

